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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,116	04/13/2001	Songxiang Wei	M-11126 US	4214

7590 10/29/2003

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EXAMINER

PATEL, HARESH N

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 10/29/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,116

Applicant(s)

WEI, SONGXIANG

Examiner

Haresh Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

1. Claims 1-24 are presented for examination.

Specification

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino

acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

The disclosure is objected to because of the following informalities:

- i. The DETAILED DESCRIPTION OF THE INVENTION section contains most of the information that belongs to the "Description of Related Art" including information disclosed under 37 CFR 1.97 and 1.98 of the BACKGROUND OF THE INVENTION, example, "OpenGL is a well-known application program interface ..." of page 16.
- ii. The BACKGROUND OF THE INVENTION section is insufficient. It should contain details of conference system, OpenGL, DirectDraw, shared applications, etc. for the claimed subject matter.
- iii. The DETAILED DESCRIPTION OF THE INVENTION section and all the related sections should use terms "presenter client computer" and "viewer client computer", rather "presenter computer" and "viewer computer".

Appropriate correction is required.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "An improved method to consider overlapping of non-shared applications over shared OpenGL and DirectDraw applications in a data conference system".

4. Applicant is reminded of the proper content of an abstract of the disclosure.

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A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract of the disclosure is objected to because it is missing computer terminology involved in the invention, for example, data conference system, to periodically capture of a screen shot and to transmit it to the viewer, DirectDraw application, etc. Correction is required. See MPEP § 608.01(b).

Drawings

5. Figures 1, 3A, 5A and 7A should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

6. An initialed and dated copy of Applicant's IDS form 1449, Paper No. 3, is attached to the instant Office action.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salesky et al. 6,343,313 (Hereinafter Salesky) in view of applicant's admitted prior art (AAPA).

9. As per claims 1, 9 and 17, Salesky teaches the following:

a method for sharing an application, the method comprising,
a computer-readable storage medium storing a computer program executable by a computer, the computer program comprising computer instructions for,
a data conferencing system comprising (e.g., One conferencing system allows conference participants to share all or a portion of the display seen on their computer screens, abstract):
a presenter computer connected to one or more server computers via a global area network (e.g., presenter client computer, figure 1),

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a viewer computer connected to the one or more server computers via the global area computer network (e.g., attendee client computer, figure 2),

and a computer program executable by the presenter computer (e.g., One conferencing system allows conference participants to share all or a portion of the display seen on their computer screens. The conferees may be at sites removed from each other, or may view a recorded presentation or archived conference at different times. Conference participants are either "presenters" who can modify the display or "attendees" who cannot modify the display, abstract),

determining a position and a size of a non-OpenGL region of a shared application window by monitoring function calls made by the application (e.g., the position of a pointer icon on a conferee's view of the captured region and an icon specified by the conferee might be communicated to each of the other attendee and presenter clients, so that each of the participants can see what each conferee is pointing at should a conferee choose to point to an element of the shared captured region, col. 2, lines 28 – 54, Color map changes can occur on the presenter client display system as the presenter opens, makes changes in, or closes a program, either in a window that overlaps the capture rectangle or in a window beyond the capture rectangle used for his or her own private work, col. 15, line 36 – 44),

determining a position and a size of an OpenGL region of a shared application window by monitoring OpenGL function calls made by the application (e.g., the position of a pointer icon on a conferee's view of the captured region and an icon specified by the conferee might be communicated to each of the other attendee and presenter clients, so that each of the participants can see what each conferee is pointing at should a conferee choose to point to an element of the

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shared captured region, col. 2, lines 28 – 54, Color map changes can occur on the presenter client display system as the presenter opens, makes changes in, or closes a program, either in a window that overlaps the capture rectangle or in a window beyond the capture rectangle used for his or her own private work, col. 15, line 36 – 44); and

capturing a screen shot of an image corresponding to the non-OpenGL and the OpenGL regions of the shared application window (e.g., In a video conferencing system, a snap-shot of the conference presentation is taken at regular intervals, such as thirty times per second, col. 1, lines 18 – 34),

wherein the position and the size of the non-OpenGL region and the position and the size of the OpenGL region define a position and a size of the shared application window (e.g., the presenter selects an area of his or her computer display to be shared ("capture region"); it need not be a rectangular area. More than one capture region may be selected at a time and multiple regions may overlap. The selection may be made on a screen display, in a memory representation of a display, or in an aliased representation of either; the selection can be changed at any time. If the client has multiple monitors or multiple displays on a single monitor, independent selection can be made for each. A window provided by the presenter client computer's operating system, or by an application or other program, may be designated as the capture region, and then the capture region can be adjusted automatically if the window is moved or resized. This may be a fixed window, or the capture operation can be set to follow the selection of the current ("top" or "focus") window automatically. In a simple embodiment, the presenter selects a rectangular region on the screen ("capture rectangle"). For efficient transmission, the capture rectangle is broken up into rectangular subregions (blocks) to give good

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perception of response time. For example, if the presenter has selected all of an 800-by-600-pixel screen display to be within the capture rectangle, then it might be broken up into twelve 200-by-200-pixel square blocks. If the capture rectangle is later adjusted to be smaller, the blocks are changed to be made up of smaller rectangles, or the capture rectangle is divided-into fewer blocks, or both; correspondingly, if the capture rectangle is later adjusted to be larger, the blocks are changed to be larger rectangles or the capture rectangle is divided into more blocks, or both. For efficient handling of blocks, the blocks are preferably kept between 1000 and 4000 pixels in size. As the blocks are updated on the attendee's screen, they are presented from the top row to the bottom row and from left to right within a row, col. 10, line 46 – col. 11, line 11).

However, Salesky does not specifically teach OpenGL API based application.

AAPA teaches OpenGL API bases applications (e.g., OpenGL is a well-known application program interface (API) that is used by applications to draw graphics on a presenter's computer screen, col. 16, lines 15 – 17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Salesky with the teachings of AAPA in order to facilitate shared applications having the OpenGL APIs at the presenter's client computer.

10. As per claims 2-8, 10-16 and 18-24, Salesky teaches the following:

transmitting the position and the size of the shared application window to a viewer (e.g., Existing systems that capture graphics display commands, transmit them, then use them to recreate the original display appear to have great compression, which entails economy of network transmission, col. 10, lines, 29 – 45),

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transmitting the screen shot to a viewer (e.g., In a video conferencing system, a snap-shot of the conference presentation is taken at regular intervals, such as thirty times per second, col. 1, lines 18 – 34),

determining a position and a size of a non-shared application window by monitoring function calls made by the non-shared application (e.g., the presenter selects an area of his or her computer display to be shared ("capture region"); it need not be a rectangular area. More than one capture region may be selected at a time and multiple regions may overlap. The selection may be made on a screen display, in a memory representation of a display, or in an aliased representation of either; the selection can be changed at any time. If the client has multiple monitors or multiple displays on a single monitor, independent selection can be made for each. A window provided by the presenter client computer's operating system, or by an application or other program, may be designated as the capture region, and then the capture region can be adjusted automatically if the window is moved or resized. This may be a fixed window, or the capture operation can be set to follow the selection of the current ("top" or "focus") window automatically. In a simple embodiment, the presenter selects a rectangular region on the screen ("capture rectangle"). For efficient transmission, the capture rectangle is broken up into rectangular subregions (blocks) to give good perception of response time. For example, if the presenter has selected all of an 800-by-600-pixel screen display to be within the capture rectangle, then it might be broken up into twelve 200-by-200-pixel square blocks. If the capture rectangle is later adjusted to be smaller, the blocks are changed to be made up of smaller rectangles, or the capture rectangle is divided-into fewer blocks, or both; correspondingly, if the capture rectangle is later adjusted to be larger, the blocks are changed to be larger rectangles or

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the capture rectangle is divided into more blocks, or both. For efficient handling of blocks, the blocks are preferably kept between 1000 and 4000 pixels in size. As the blocks are updated on the attendee's screen, they are presented from the top row to the bottom row and from left to right within a row, col. 10, line 46 – col. 11, line 11); and

if the non-shared application window overlaps the shared application window, determining a position and a size of an overlapping region (e.g., the position of a pointer icon on a conferee's view of the captured region and an icon specified by the conferee might be communicated to each of the other attendee and presenter clients, so that each of the participants can see what each conferee is pointing at should a conferee choose to point to an element of the shared captured region, col. 2, lines 28 – 54, Color map changes can occur on the presenter client display system as the presenter opens, makes changes in, or closes a program, either in a window that overlaps the capture rectangle or in a window beyond the capture rectangle used for his or her own private work, col. 15, line 36 – 44, These and other features apply to other data streams shared in the conference or in meetings where there is no shared-image data stream, abstract),

determining whether the position or the size of the shared application window has changed by monitoring function calls made by the shared application (e.g., the presenter selects an area of his or her computer display to be shared ("capture region"); it need not be a rectangular area. More than one capture region may be selected at a time and multiple regions may overlap. The selection may be made on a screen display, in a memory representation of a display, or in an aliased representation of either; the selection can be changed at any time. If the client has multiple monitors or multiple displays on a single monitor, independent selection can be made for each. A window provided by the presenter client computer's operating system, or by

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an application or other program, may be designated as the capture region, and then the capture region can be adjusted automatically if the window is moved or resized. This may be a fixed window, or the capture operation can be set to follow the selection of the current ("top" or "focus") window automatically. In a simple embodiment, the presenter selects a rectangular region on the screen ("capture rectangle"). For efficient transmission, the capture rectangle is broken up into rectangular subregions (blocks) to give good perception of response time. For example, if the presenter has selected all of an 800-by-600-pixel screen display to be within the capture rectangle, then it might be broken up into twelve 200-by-200-pixel square blocks. If the capture rectangle is later adjusted to be smaller, the blocks are changed to be made up of smaller rectangles, or the capture rectangle is divided-into fewer blocks, or both; correspondingly, if the capture rectangle is later adjusted to be larger, the blocks are changed to be larger rectangles or the capture rectangle is divided into more blocks, or both. For efficient handling of blocks, the blocks are preferably kept between 1000 and 4000 pixels in size. As the blocks are updated on the attendee's screen, they are presented from the top row to the bottom row and from left to right within a row, col. 10, line 46 – col. 11, line11); and

if the position or the size of the shared application window has changed, determining a new position and/or a new size of the shared application window (e.g., During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56),

periodically capturing the image corresponding to the shared application

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window (e.g., During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56),

periodically transmitting the captured image to the viewer (e.g., During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56).

Conclusion

11. Salesky clearly anticipates the applicant's invention, which considers the overlapping of non-shared applications over shared applications in a data conference system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (703) 605-5234. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee, can be reached at (703) 305-8498.

The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 306-5404.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

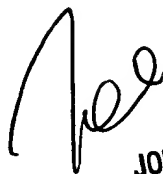
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Hareesh Patel

October 10, 2003.

A handwritten signature in black ink, appearing to read 'J. Follansbee', is written over the printed name and title.

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100